ZUBIN, A.M., kand.biolog.nauk; LAZAREVA, Ye.P., mladshiy nauchnyy sotrudnik; MAKAROVA, S.V., laborant

Developing a method for the microscopic control of the impregnation of pelt tissues. Nauch.issl.trudy NIIMP no.11:80-90 '62. (MIRA 16:5)

(Fur--Dressing and dyeing) (Resins synthetic) (Fluorescence microscopy)

MAKAROVA, S.V.; ALIMARIN, I.P.

Extraction of fluotantalate with basic dyes. Report No.3: Composition of fluotantalate compounds with triphenylmethane dyes. Zhur. anal. khim. 19 no.7:847-850 '64.

1. Moscow State University. (MIRA 17:11)

carried out at a ratio of tantalum to niobium of 1:100. Tantalum can be re-extracted from the organic phase by a single shaking with a 2% solution of $(NH_4)_2C_2O_4$. The method can also be used for the separation of tantalum from zirconium and titanium. There are 4 figures and 3 tables.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova (Moscow State University imeni M.V.Lomonosov)

SUBMITTED: May 23, 1962

S/075/62/017/009/003/006
E071/E436

AUTHORS: Alimarin, I.P., Makarova, S.V.

TITLE: Separation of small amounts of tantalum from niobium by the extraction of tetraphenylarsonium fluoro-tantalate

PERIODICAL: Zhurnal analiticheskoy khimii, v.17, no.9, 1962, 1072-1075

TEXT: The use of tetraphenylarsonium chloride for separating small quantities of tantalum from niobium, titanium and zirconium is described. The efficiency of extraction was controlled using radioactive isotopes of ^{182}Ta, ^{95}Nb and ^{95}Zr. The dependence of the degree of extraction of tantalum with chloroform on the concentration of tetraphenylarsonium chloride, sodium fluoride and acidity of the solution was investigated. It was established that tantalum can be quantitatively extracted (98 to 100%), with an excess of the reagent within a wide range of acidity in sulphuric as well as hydrochloric acid. An insignificant extraction of niobium takes place only from sulphuric acid solutions. The separation can be successfully

Card 1/2

MAKAROVA, S.P.

Catalog of 21 cm. line profiles. Astron. zhur. 41 no.4:602-618 Jl-Ag'64
(MIRA 17:8)

1. Gosudarstvennyy astronomicheskiy institut im. P.K.Shternberga.

MAKAROVA, S.P.

Venus in 1956. Biul.VAGO no.23:46-50 '58. (MIRA 11:11)

1. Moskovskoye otdeleniye Vsesoyuznogo astronomo-geodezicheskogo obshchestva, planetnyy otdel.
(Venus (Planet))

MAKAROVA, S.P.

Determining the radiment of Lyrids by visual observations in 1955.
Biul. VAGO no.21:50-51 '58. (MIRA 11:6)

1.Moskovskoye otdeleniye Vsesoyuznogo astronomo-geodezicheskogo obshchestva, meteornyy otdel.
(Meteors--April)

MAKAROVA, S.P.

Introduction of the cyclic method of fermentation. Spirt. prom. 24 no.3:27-29 '58. (MIRA 11:6)

(Distilling industries)

VERTMAN, A.A.; MAKAROVA, S.N.

Adiabatic calorimeter for determining the heat capacity of melts.
Zav. lab. 30 no.9:1151-1152 '64. (MIRA 18:3)

1. Institut metallurgii imeni Baykova.

MAKAROVA, S.M., red.

[Contribution of science to agriculture; collection of agricultural information of scientific institutions in the Far East] Nauka - sel'skomu khoziaistvu; sbornik sel'skokhoziaistvennoi informatsii nauchnykh uchrezhdenii Dal'nego Vostoka. Khabarovsk, 1962. 35 p.
(MIRA 17:5)

1. Khabarovsk. Dal'nevostochnyy nauchno-issledovatel'skiy institut sel'skogo khozyaystva.

MAKAROVA, S. M. (Assist. Prof)

"Forced Oscillations of the Foundation of a Crank case-Connecting Rod Mechanism."

report presented at the 13th Scientific Technical Conference of the Kuybyshev Aviation Institute, March 1959.

MAKAROVA, S. M.

Opyt povysheniya urozhaynosti zernovykh kul'tur v nechernozemnoy polose (Experience in increasing grain crop productivity in the nonchernozem zone) Moskva, Izdatel'stvo "Znanie", 1953. 29 p. map, tables.

SO: N/5
723
.M23

MAKAROVA, S.I.; ZOZ, N.N.

Induced system mutations in wheat. Genetika no.2:113-118 Ag '65. (MIRA 18:10)

1. Institute of Chemical Physics, Academy of Sciences of the U.S.S.R., Moscow.

ZOZ, N.N.; KOLOTENKOV, P.V.; MAKAROVA, S.I.

Pea mutations induced by ethylenimine and its derivatives in the third generation. Dokl. AN SSSR 164 no.5:1159-1160 O '65.

(MIRA 18:10)

1. Institut khimicheskoy fiziki AN SSSR. Submitted December 28, 1964.

ZOZ, N.N.; MAKAROVA, S.I.; KOLOMENKOV, P.V.; SAL'NIKOVA, T.V.; KOZHARINA, N.N.; GRIGOROVA, N.V.

Wheat mutations induced by chemical mutagens. Dokl. AN SSSR 163 no.1: 224-226 Jl '65. (MIRA 18:7)

1. Institut khimicheskoy fiziki AN SSSR. Submitted December 28, 1964.

ZOZ, N.N.; MAKAROVA, S.I.

Inheritable changes in winter wheat induced by chemical mutagens. Biul. MOIP. Otd. biol. 70 no.2:124-125 Mr-Ap '65. (MIRA 18:5)

ZOZ, N.N.; MAKAROVA, S.I.

Cytological analysis of the mutagenic action of nitrosoethyl-urea and nitrosomethylurea. TSitologiia 7 no.3:405-408 My-Je '65.
(MIRA 18:10)

1. Otdel khimicheskikh i biologicheskikh protsessov Instituta khimicheskoy fiziki AN SSSR, Moskva.

ZOZ, N.N.; KOLOTENKOV, P.V.; MAKAROVA, S.I.

Mutations in peas induced by ethylenimine and its derivatives.
Dokl. AN SSSR 159 no.6:1397-1398 D '64 (MIRA 18:1)

1. Institut khimicheskoy fiziki AN SSSR. Predstavlene akademikom N.V. TSitsynym.

ZOZ, N.N.; MAKAROVA, S.I.; KOLOTENKOV, P.V.; SAL'NIKOVA, T.V.; KOZHANOVA, N.M.; GRIGOROVA, N.V.

Variation in wheat, induced by chemical mutagens, in the first generation after treatment. Dokl. AN SSSR 159 no.4:915-917 D '64 (MIRA 18:1)

1. Institut khimicheskoy fiziki AN SSSR. Predstavleno akademikom N.V. TSitsinym.

MAKAROVA, S.I.

Hereditary changes in winter wheat induced by gamma irradiation.
Radiobiologiia 4 no.6:924-926 '64. (MIRA 18:7)

1. Institut khimicheskoy fiziki AN SSSR, Moskva.

POPOV, V.I.; MAKAROVA, S.D.; STANKEVICH, Yu.V.; FILIPPOV, A.A.

[Handbook on the determination of sedimentary facies complexes and the methods of facies-paleogeographic mapping.] Rukovodstvo po poredeleniiu osadochnykh fatsial'nykh kompleksov i metodika fatsial'no-paleogeograficheskogo kartorovaniia. Leningrad, Gostoptekizdat, 1963. 713 p. (Tashkent. Universitet. Problemnaia laboratoriia osadochnykh formatsii i osadochnykh rud. Trudy, no.2). (MIRA 18:7)

POPOV, V.I.; MAKAROVA, S.D.; YURKOVA, Ye.M.; BABADAGLY, V.A.

Facies-paleogeographical maps of Paleogene formations in the South Tajik Depression. Nauch. trudy TashGU no.256 Geol. nauki no.22: 52-55 '64 (MIRA 18:2)

MAKAROVA, S.D.

Using a locator for sedimentary facies complexes and the methods for facies-paleogeographical mapping in studying Cretaceous formations in the middle reaches of the Zeravshan River. Nauch. trudy TashGU no.256 Geol. nauki no.22:21-24 '64 (MIRA 18:2)

Seismotectonics of Central Asia (Cont.)

focus earthquakes produce an accumulation of tensions which are reflected in the seismic shocks; the foci of the latter are not very deep. Young mountain systems are characterized by different degrees of seismic activity and different depths of earthquake foci. This indicates that their roots have different structure and depth. Surface earthquakes, with depth of focus from 0 to 10 km, are concentrated mainly in districts of large tectonic depressions and piedmonts, and apparently originate at the juncture of Paleozoic and Mesozoic deposits, but also in the layers of Mesozoic and Cenozoic deposits. In this connection it is noted that the unbroken surface of the discontinuity pointed out by Ye. A. Rozovaya for Central Asia at a depth of 0 to 10 km does not really exist.

Card 3/3

P. N. K.

Seismotectonics of Central Asia (Cont.)

35 ± 10, 50 ± 10, 100 ± 20, 200 ± 20, 300 ± 20 (data by Ye. A. Rozovaya and N. A. Linden), and also a chart of the seismic zones in Central Asia. These zones are characterized by different maximum depths of earthquake foci. There are two seismographic cross sections which show the increase of maximum depth of foci as we proceed from the northern zones to the more southerly ones. Using data on earthquakes from the northwestern Himalayas and the Indian platform, where the depths decrease again as we approach the earthquake-free zone of the central part of this platform, the author produced a schematic meridional cross section of the Pamir syntaxis. This cross section forms a curve coming to the earth's surface in the north, in the southern part of Kazakhstan and in the southern plains of India. At Pamir the curve makes the greatest dip (to a depth of 300 km) and forms the lower border of that part of the earth's crust which corresponds to the seismic area of the Pamir syntaxis. In Central Asia we distinguish five seismic belts (from the south to the north) varying as to earthquake depth (in km): 1) from 0 to 300 ± 20; 2) from 0 to 200 ± 20; 3) from 0 to 100 ± 20; 4) from 0 to 50 ± 10; 5) from 0 to 35 ± 10. It is assumed that deep-

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 5, p 49 (USSR) 15-57-5-6042

AUTHOR: Makarova, S. D.

TITLE: Seismotectonics of Central Asia (O nekotorykh voprosakh seysmotektoniki Sredney Azii)

PERIODICAL: Zap. Uzbekist. otd. Vses. mineralog. o-va, 1955, Nr 7, pp 135-149.

ABSTRACT: Central Asia is divided into two areas--the earthquake-free plains in the northwest, and the seismic area of the southeast. Within the limits of the latter we distinguish 12 young mountain systems (Pamir, Turkestan, the Alay system, and Tyan-Shan with the elevated areas adjacent to it). The article contains a map illustrating the relation of the epicenters of shallow earthquakes (depth of focus, 0 to 10 km) to the spread of Mesozoic and Cenozoic deposits. Farther on there is also a series of maps indicating the epicenter distribution of earthquakes with depths of foci (in km):

Card 1/3

L 10394-67

ACC NR: AP7003121

degree of swelling of the anion-exchange resins was determined by the structure of the bridge-forming component, with substantially greater swelling observed among anion-exchange resins produced on the basis of the styrene-divinyl copolymer. The rate of exchange of ions from salt solutions was found to be determined by the macromolecular structure of the anion-exchange resin. For styrene-divinyl polymers, ion-exchange equilibrium was established within 15 minutes, whereas the styrene-divinylbenzene anion-exchange resins were less suitable for chromatographic purposes, establishment of ion-exchange equilibrium requiring five to 20 hours. The exchange capacity varied little within the pH range 3-8. Orig. art. has: 3 figures and 3 tables. [JPRS: 38,970]

SUB CODE: 07 / SUBM DATE: 20Jul64 / ORIG REF: 005 / OTH REF: 007

Card 2/2

L 10394-67 EWT(m) DS/RM SOURCE CODE: UR/0080/66/039/008/1754/1760
ACC NR: AF7003121 20

AUTHOR: Trostyanskaya, Ye. B.; Makarova, S. B.

ORG: All-Union Scientific Research Institute of Chemical Reagents and Especially Pure Chemical Substances (Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh reaktivov i osobo chistykh khimicheskikh veshchestv)

TITLE: Anion-exchange resins belonging to the class of onium compounds

SOURCE: Zhurnal prikladnoy khimii, v. 39, no. 8, 1966, 1754-1760

TOPIC TAGS: anion exchange resin, chromatography, copolymer, styrene, vinyl compound

ABSTRACT: Chromatographic separation of ions from salt solutions requires that the ion-exchange resin possess multifunctionality, a high degree of ionization in a broad range of pH values, and a high rate of establishment of equilibrium in the exchange reaction with ions of the solution. Copolymers of styrene with divinylbenzene and styrene with divinyl with various amounts of the bridge-forming component in the copolymer, were used to synthesize anion-exchange resins for a study of the influence of structure of the macromolecules upon the ion-exchange properties of the resins. The copolymers were chloromethylated, and then the chlorine atom replaced by amines, phosphines, or sulfides. Anion-exchange resins with sulfonium and phosphonium structural groups were readily decomposed in solutions of alkali; anion-exchange resins tested with ammonium functional groups acquired the structure of bases, the degree of association of which was determined by the structure of the radicals on the quaternary nitrogen. The thermal stability of the anion-exchange resins in the salt form decreased in the series ammonium > phosphonium > sulfonium compounds. The

UDC: 661.183.123

Card 1/2

L 08456-67

ACC NR: AP6030900

nium compounds readily decompose in alkaline solutions. The thermal stability of anion exchangers in the salt form decreases in the order ammonium > phosphonium > sulfonium compounds. The degree of swelling of the exchangers is determined by the structure of the bridge-forming component, and the rate of the ion exchange reaction in salt solutions is determined by the macromolecular structure of the anion exchanger. Orig. art. has: 3 figures and 3 tables.

SUB CODE: 07/ SUBM DATE: 20Jul64/ ORIG REF: 005/ OTH REF: 007

Card 2/2

L 08456-67 EWT(m) DS/RM

ACC NR: AP6030900 (A,N) SOURCE CODE: UR/0080/66/039/008/1754/1760

AUTHOR: Trostyanskaya, Ye. B.; Makarova, S. B.

ORG: All-Union Scientific Research Institute of Chemical Reagents and High-Purity Substances (Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh reaktivov i osobo chistykh khimicheskikh veshchestv)

TITLE: Anion exchangers belonging to the class of onium compounds

SOURCE: Zhurnal prikladnoy khimii, v. 39, no. 8, 1966, 1754-1760

TOPIC TAGS: anion exchange resin, ammonium compound, organic sulfur compound, organic phosphorus compound

ABSTRACT: In order to determine the influence of the structure of macromolecules of anion exchangers on their ion-exchanging properties, in synthesizing the exchangers use was made of styrene-divinylbenzene (SD) and styrene-bivinyl (SB) copolymers containing various amounts of the bridge-forming component in the copolymr. The copolymers were chloromethylated, then the chlorine atom was replaced by amine, phosphines or sulfides, producing ammonium, phosphonium and sulfonium compounds. Potentiometric titration curves of the polymeric ammonium compounds studied were recorded, and from them the apparent dissociation constants were determined. The ammonium compounds have the structure of bases whose degrees of dissociation are determined by the structure of the radicals attached to the quaternary nitrogen atom. The sulfonium and phospho-

Card 1/2 UDC: 661.183.123

TROSTYANSKAYA, Ye.B.; LOSEV, I.P. [deceased]; MAKAROVA, S.B.

Synthesis of polymeric insoluble sulfonium compounds.
Vysokom. soed. 5 no.12:1824-1828 D '63. (MIRA 17:1)

1. Moskovskiy khimiko-tekhnologicheskiy institut im. D.I. Mendeleyeva i Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh reaktivov i osobo chistykh khimicheskikh veshchestv.

mixtures. The insoluble phosphonium compounds can be used as anion exchange filters. Their adsorptive power for the Cl^-/NO_3^- exchange is at about 1.4 - 1.5 mg-equ/g. There are 1 figure and 6 tables.

ASSOCIATION: Moskovskiy khimiko-tekhnologicheskiy institut im. D. I. Mendeleyeva (Moscow Institute of Chemical Technology imeni D. I. Mendeleyev)

SUBMITTED: July 31, 1961

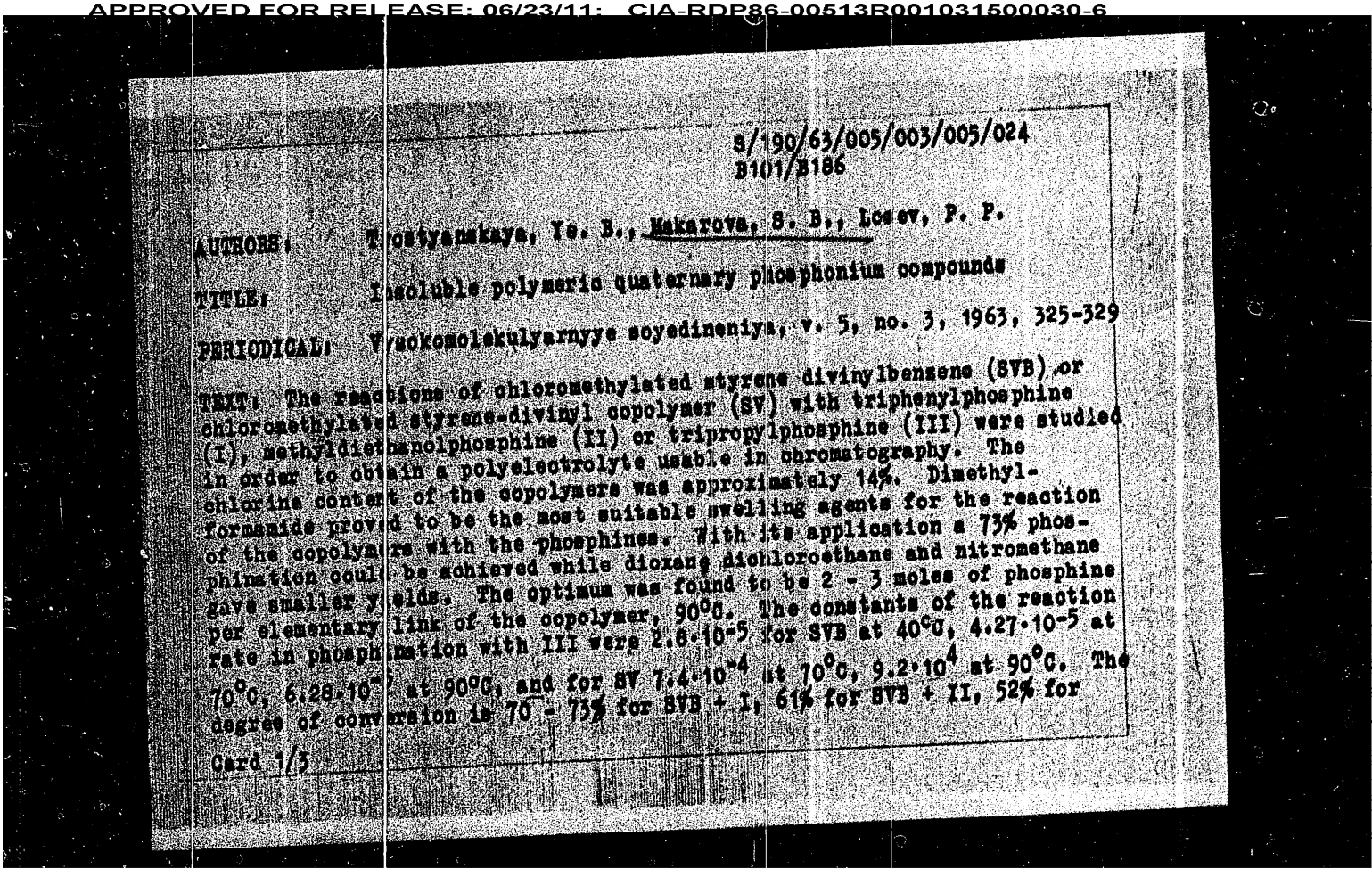
Insoluble polymeric quaternary...

DVB + III, and 76% for SV + I, 64% for SV + II, 58% for SV + III. The following values were obtained for the constants of the anion exchange of the insoluble onium compounds where the chlorine in the polymer is substituted by trimethylamine (A), trimethanolamine (B), dimethylaniline (C), I, II or III:

exchanged anions	A	B	C	I	II	III
SO_4^{2-}/Cl^-	1.0	0.25	0.069	0.405	0.63	1.2
SO_4^{2-}/Br^-	3.46	0.37	0.61	0.605	1.4	3.1
SO_4^{2-}/I^-	5.0	1.59	2.4	0.43	2.3	5.6
Cl^-/NO_3^-	2.9	0.92	2.76	2.18	1.6	2.2
Cl^-/CH_3COO^-	0.258	0.116	0.197	0.165	0.153	0.28

The somewhat higher exchange constants of the phosphonium compounds allow of easier chromatographic separation from anions and solutions of salt

Card 2/3



S/190/63/005/003/005/024
B101/B186

AUTHORS: Tsetlyamskaya, Ye. B., Makarova, S. B., Losev, P. P.

TITLE: Insoluble polymeric quaternary phosphonium compounds

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 5, no. 3, 1963, 325-329

TEXT: The reactions of chloromethylated styrene divinylbenzene (SVB) or chloromethylated styrene-divinyl copolymer (SV) with triphenylphosphine (I), methyldiethanolphosphine (II) or tripropylphosphine (III) were studied in order to obtain a polyelectrolyte usable in chromatography. The chlorine content of the copolymers was approximately 14%. Dimethylformamide proved to be the most suitable swelling agents for the reaction of the copolymers with the phosphines. With its application a 73% phosphination could be achieved while dioxane, dichloroethane and nitromethane gave smaller yields. The optimum was found to be 2 - 3 moles of phosphine per elementary link of the copolymer, 90°C. The constants of the reaction rate in phosphination with III were $2.8 \cdot 10^{-5}$ for SVB at 40°C, $4.27 \cdot 10^{-5}$ at 70°C, $6.28 \cdot 10^{-4}$ at 90°C, and for SV $7.4 \cdot 10^{-4}$ at 70°C, $9.2 \cdot 10^{-4}$ at 90°C. The degree of conversion is 70 - 75% for SVB + I, 61% for SVB + II, 52% for

Card 1/2

TROSTYANSKAYA, Ye.B.; MAKAROVA, S.B.; TEVLINA, A.S.

Insoluble polymeric quaternary ammonium bases. Vysokom.soed. 3 no.9:1358-1363 S '61. (MIRA 14:9)

1. Moskovskiy khimiko-tekhnologicheskiy institut imeni D.I.Mendeleyeva.

(Amination) (Polymers)

MAKAROVA, S.B.

PHASE I BOOK EXPLOITATION SOV/4984

International symposium on macromolecular chemistry. Moscow, 1960.

Mezhdunarodnyy simpozium po makromolekulyarnoy khimii SSSR, Moskva, 14-18 iyunya 1960 g.; doklady i avtoreferaty. Sektsiya III. (International Symposium on Macromolecular Chemistry Held in Moscow, June 14-18, 1960; Papers and Summaries) Section III. [Moscow, Izd-vo AN SSSR, 1960] 469 p. 55,000 copies printed.

Tech. Ed.: P. S. Kashina.

Sponsoring Agency: The International Union of Pure and Applied Chemistry. Commission on Macromolecular Chemistry.

PURPOSE: This book is intended for chemists interested in polymerization reactions and the synthesis of high molecular compounds.

COVERAGE: This is Section III of a multivolume work containing papers on macromolecular chemistry. The articles in general deal with the kinetics of polymerization reactions, the synthesis of special-purpose polymers, e.g., ion exchange resins, semiconductor materials, etc., methods of catalyzing polymerization reactions, properties and chemical interactions of high molecular materials, and the effects of various factors on polymerization and the degradation of high molecular compounds. No personalities are mentioned. References given follow the articles.

40

of chloromethylation to the same extent. If the catalyst exceeds 75% of weight of the styrene compounds in the copolymer, the yield is not increased (Fig 2). The authors applied the Blanc reaction also to the chloromethylation of cross-linked copolymers containing condensed aromatic rings. The chloromethylated products of various copolymers of styrene and vinylnaphthalene were used for the production of insoluble quaternary ammonium bases that are important as anion-exchange resins. These quaternary ammonium bases have a swelling capacity in water that differs with the structure of the original copolymer. Thus it becomes possible to apply the chromatographic method of "ion-sieves", that up to now has only been used for separating cations, to the separation of anions as well. Table 4 shows the most important characteristics of the strongly basic "anion-sieves" obtained by the authors. There are 3 figures, 4 tables, and 11 references, 5 of which are Soviet.

ASSOCIATION: Moskovskiy khimiko-tekhnologicheskiy institut imeni D. I. Mendeleyeva (Moscow Institute of Chemical Technology imeni D. I. Mendeleyev)

polymer. The authors found out that the degree of cross-linking during the chloromethylation of linear copolymers of styrene is reduced with an increasing amount of aliphatic residues (that cannot be chloromethylized). Table 1 shows the results of chloromethylation of copolymers in styrene with 1,3-butadienes depending on the number of styrene molecules in the polymer. In further experiments the Blanc reaction was applied to the chloromethylation of three copolymers of styrene with various degrees of cross-linking (diene components: divinylbenzene, diallyl maleate, ethylene glycol-dimethacrylate). Table 2 and figure 1 show the results obtained (influence of the diolefin structure upon the degree of chloromethylation and the period of reaction. The content of chlorine in the copolymers, after a certain period of chloromethylation (in all cases investigated 8-10 hours), reaches a maximum and then declines again. Of the three polymers investigated the copolymer of styrene with diallyl maleate showed the maximum chloromethylation under the same conditions. Table 3 shows the influence of catalysts upon the degree of chloromethylation. $ZnCl_2$, $SnCl_2$, and $SnCl_4$ increase the yield

5.3831
~~5 (3), 5 (4)~~

AUTHORS: Trostyanskaya, Ye. B., Makarova, S. B., Tevlina, A. S.

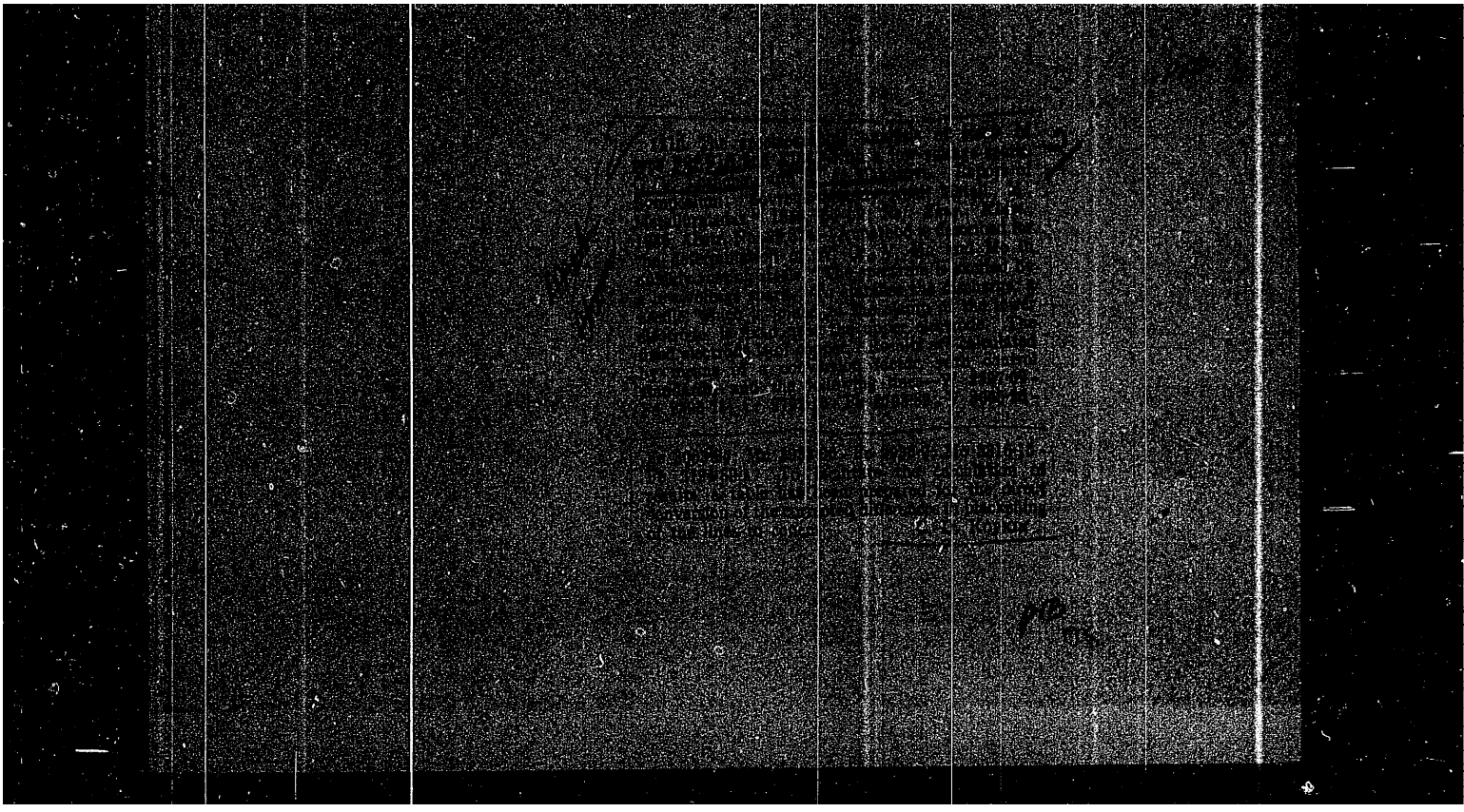
S/064/59/000/07/006/035
B005/B123

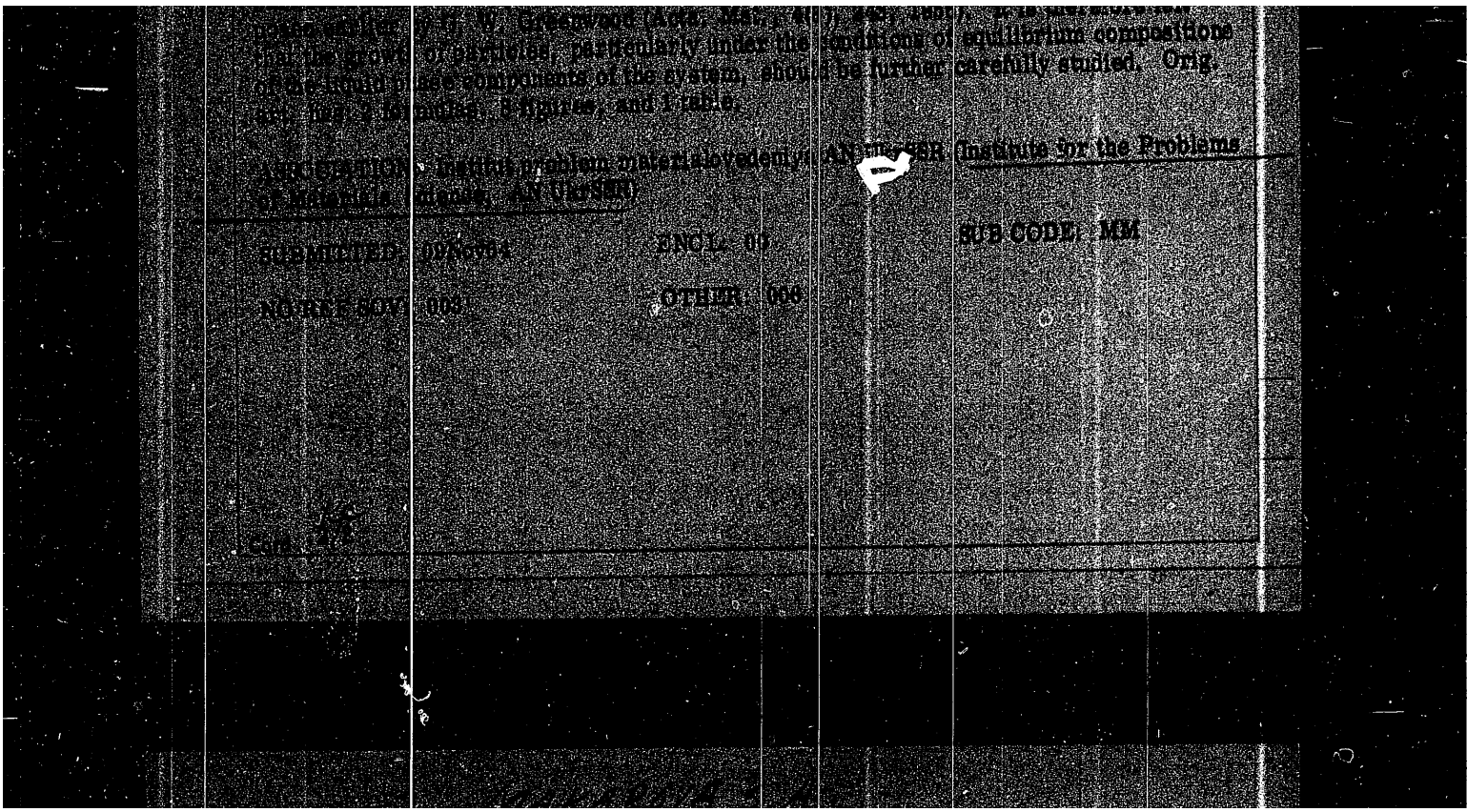
TITLE: Chloromethylation of Copolymers of Vinylaromatic Compounds

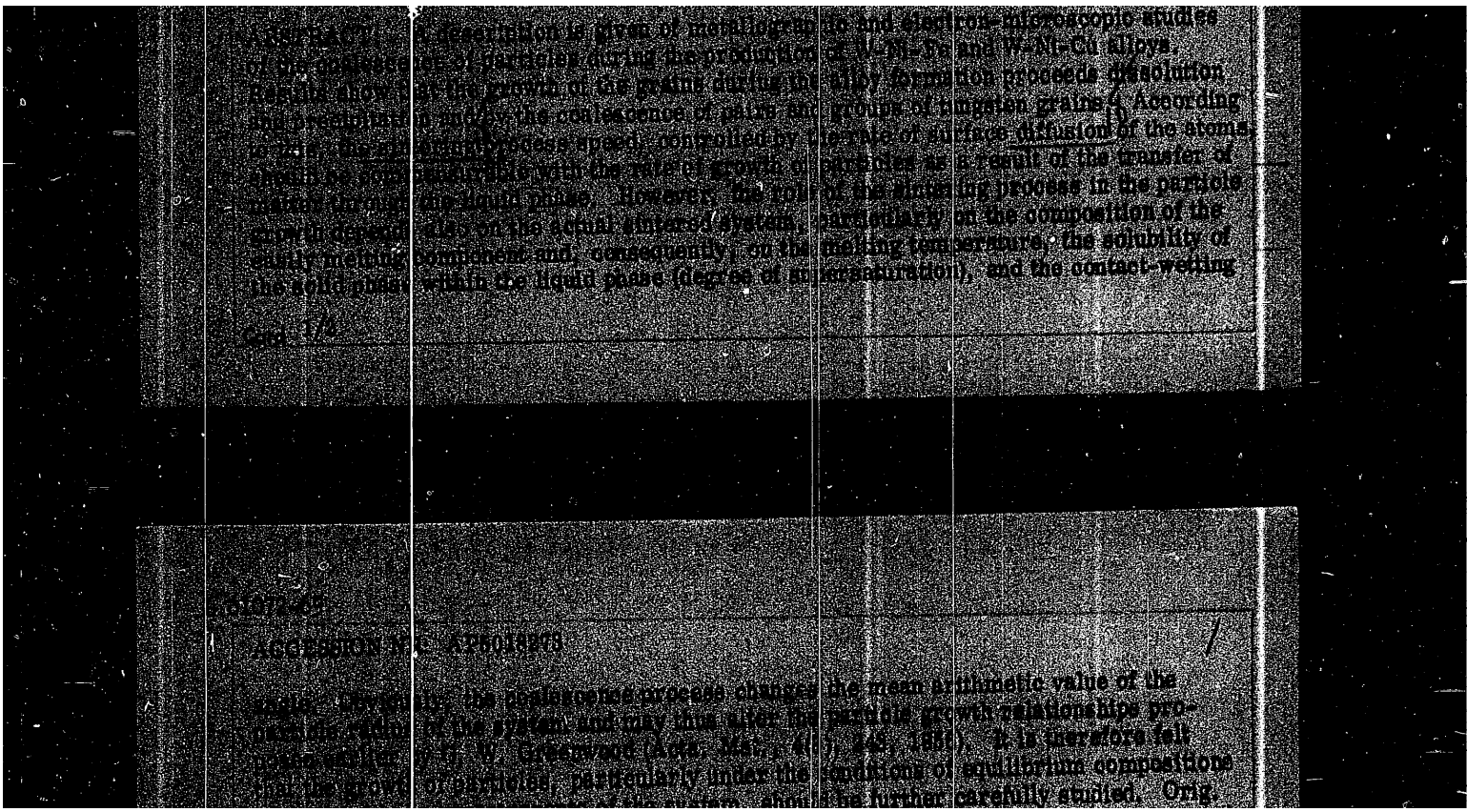
PERIODICAL: Khimicheskaya promyshlennost', 1959, Nr 7, pp 577 - 580 (USSR)

ABSTRACT: In the introduction to the present paper the authors discuss some methods described in publications of the chloromethylation of polymers and copolymers in styrene (Refs 5-10). In all these methods chloromethyl ether or dichloromethyl ether were used as reagents. The use of these reagents in industrial syntheses is not advisable as they are very volatile and produce poisonous vapors. The authors investigated the conditions under which the Blanc reaction can be applied to a chloromethylation of various copolymers in vinyl-aromatic compounds. In the Blanc reaction formaldehyde and hydrochloric acid are used as reagents instead of chloromethyl ether. Ordinary zinc chloride usually serves as catalyst. When applying this reaction to the chloromethylation of copolymers of styrene, however, intermolecular secondary reactions are caused by the great mobility of the chlorine atom in the chloromethyl group, that lead to a cross-linking of the

Card 1/3







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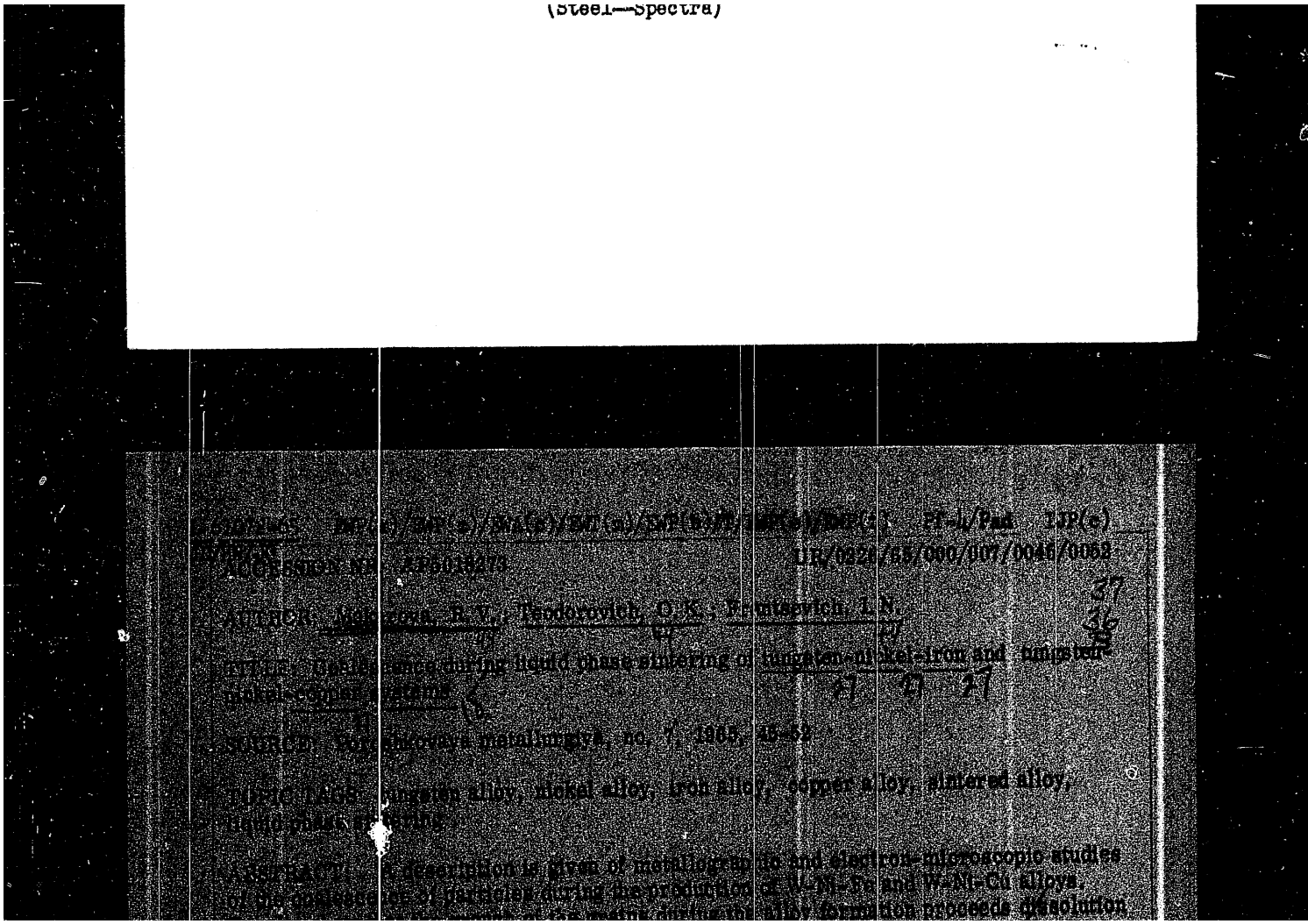


DZYKOVICH, I.Ya.; MAKAROVA, R.V.; TEODOROVICH, O.K.; FRANTSEVICH, I.N.

Distribution of elements during the formation of ceramic metal alloys in the system W - Ni - Fe. Porosn. met. 5 no.8:62-69 Ag '65. (MIRA 18:9)

1. Institut elektrosvarki imeni Patona AN UkrSSR i Institut problem materialovedeniya AN UkrSSR.

MAKAROVA, R.V.; TEODOROVICH, O.K.; FRANTSEVICH, I.N.

The coalescence phenomenon during liquid phase sintering in systems tungsten - nickel - iron and tungsten - nickel - copper. Porosh. met. 5 no.7:45-52 Jl '65. (MIRA 18:8)

1. Institut problem materialovedeniya AN UkrSSR.

L 1679-66

ACCESSION NR: AP5020772

6

sintered in a furnace at 1450 C for 2 hours, with rapid cooling. One face of each sample was polished for examination. Results of experiments show that, in tungsten-nickel iron alloys, the introduction of iron has an effect on the mutual solubility of tungsten and nickel. In alloys containing iron, in comparison with tungsten nickel alloys, there is observed a contraction of the heterodiffusion front. The distribution of iron with respect to the tungsten grain remains constant, independent of the composition of the alloy, and more uniform in spite of the solubility which is five times greater than the solubility of nickel in alloys with an identical ratio of elements. Orig. art. has: 4 figures and 2 tables

ASSOCIATION: Institut elektrosvarki im. E. O. Patona AN USSR (Electric Welding Institute, AN UkrSSR); Institut problem materialovedeniya AN USSR (Institute for Problems of Materials Processing, AN UkrSSR)

SUBMITTED: 06Oct64 ENCL: 00 SUB CODE: MM

NR REF SOV: 003 OTHER: 000

Card 2/2

L 1679-66 EWP(e)/EWT(m)/T/EWP(t)/EWP(k)/EWP(z)/EWP(b)/EWA(c) IJP(c) JD/JW/JG

ACCESSION NR: AP5020772 UR/0226/65/000/008/0062/0069

AUTHOR: Dzekovich, I. Ya.; Makarova, R. V.; Teodorovich, O. K.; Frantsevich, I. N.

TITLE: Distribution of elements in forming metal ceramic alloys of the tungsten-nickel-iron system

SOURCE: Poroshkovaya metallurgiya, no. 8, 1965, 62-69

TOPIC TAGS: metal ceramic material, tungsten base alloy, nickel containing alloy, iron containing alloy, solubility

ABSTRACT: Samples of tunsten-nickel-iron alloys of the following composition were studied: W-10Ni(nickel 9.8%, remainder tungsten); W-7Ni-3Fe (7.2% nickel, 2.95% iron, remainder tungsten), W-5Ni-5Fe (5.0% nickel, 5.15% iron, remainder tungsten), and W-3Ni-7Fe (3.0% nickel, 7.0% iron, remainder tungsten). Powders were prepared from reduced tungsten powder with a grain size of less than 40 microns and an aqueous solution of the nitrogen salts of nickel and iron and were reduced in a hydrogen atmosphere at 450 and 850 C. They were pressed at 20 kn/cm^2 into samples with a diameter of 10 mm and a height of 10 mm and

Card 1/2

A. N.
MAKAROVA, R. V.; PILYANKEVICH, FEDOROVICH, O. K.; FRANTSEVICH, I. N.

"Vorgange beim sintern mit flussiger phase in den systemen W-Ni-Fe und W-Ni-Cu."

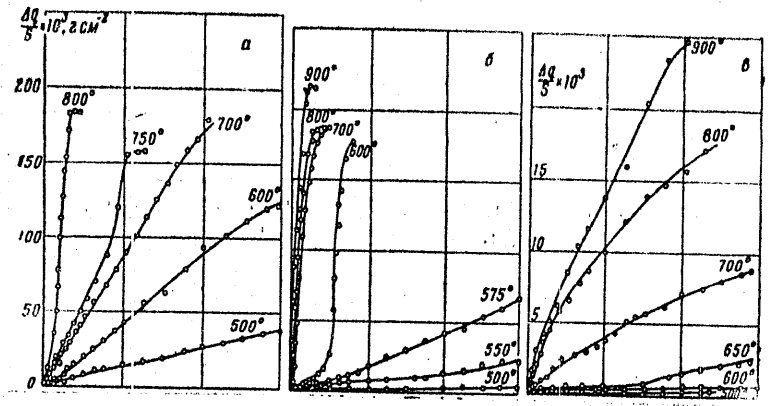
report submitted for 3rd Intl Conf on Powder Metallurgy, Eisenach, E. Germany, 13-15 May 1965.

Kiev, UkSSR.

Oxidation of alloys of titanium ... 28876
S/180/61/000/004/014/020
E021/E580

ASSOCIATION: Institut metallokeramiki i spetsial'nykh splavov AN UkrSSR (Institute of Cermets and Special Alloys AS UkrSSR)

SUBMITTED: June 1, 1960



Card 3/5

Fig.2

oxidation. The alloy containing 70% Zr oxidises more uniformly. Fig.3 shows graphs of log K against $1/T \times 10^3$, where K is the constant of the parabolic law of oxidation and T is the absolute temperature. The curves are 1 - Ti + 30% Zr, 2 - Ti + 70% Zr, 3 - Ti + 90% Zr, 4 - Zr, 5 - Ti, 6 - Ta + 10% Zr, 7 - Ta + 30% Zr, 8 - Ta + 70% Zr, 9 - Ta, 10 - Zr. Fig.4 shows oxidation (after 1 hour) against Zr content (in wt.%) for Ti-Zr and Ta-Zr alloys. Thus, alloying of Ti or Ta with Zr results in a sharp decrease in resistance to oxidation, especially at temperatures above 600°C. There are 5 figures, 1 table and 15 references: 5 Soviet and 10 non-Soviet. The English-language references read as follows: Ref.5: Jenkins, A.E. The Study of Oxidation of Titan and its Alloys at High Temperatures. J.Inst. Metals, 1954-55, 84, 1; Ref.9: Mallet, M.W., Albrecht, W.M. The High Temperature Oxidation of two Zr.Sn Alloys. J.Electrochem.Soc. 1955, 102, 407; Ref.10: Wallwork, G.R., Jenkins, A.E. Oxidation of Titanium, Zirconium and Hafnium. J. Electrochem.Soc., 1959, 106,10; Ref.14: Wasilewski, R.J. The Solubility of Oxygen in and the Oxides of Tantalum, J. Amer. Chem. Soc., 1953, 75, 1000.

Card 2/5

18.8300 1496,1454, 2208

28876
S/180/61/000/004/014/020
E021/E580

AUTHORS: Voytovich, R.F. and Makarova, R.V. (Kiyev)

TITLE: Oxidation of alloys of titanium and tantalum with zirconium at high temperatures

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye tekhnicheskikh nauk, Metallurgiya i toplivo, 1961, No.4, pp.95-100

TEXT: Alloys were prepared from metals of high purity (Ti 99.99%, Zr - 99.99%, Ta - 99.9%). The kinetics of oxidation were studied by continuous weighing for 12 hours. The measured values of the oxidation (g/cm^2) of TiZr and TaZr alloys are plotted in Fig.2; the top three graphs (a - β) apply to TiZr alloys, the bottom three graphs (ƨ - e) apply to TaZr alloys. The zirconium contents, in%, were, respectively, 30 (graph a), 70 (graph б), 90 (graph β), 10 (graph ƨ), 30 (graph д) and 70 (graph e). The alloy containing 90% Zr is more oxidation resistant than the others. There is a sharp increase in oxidation rate above 600°C. At lower temperatures, the scale adheres well to the metal. The alloy of low Zr content oxidises only slowly up to 600°C. Above this temperature, there is a sharp increase in

Card 1/3

PEREL'SHTEYN, N.L.; MITGARTS, L.V., kand. tekhn. nauk; MAKAROVA, R.P., red.; SVETOZARSKIY, K.V., red.

[Manual on the manufacture of prestressed reinforced-concrete segmented girders from linear elements] Rukovodstvo po izgotovleniiu sbornykh zhelezobetonnykh predvaritel'no napriazhennykh segmentnykh ferm iz lineinykh elementov. Moskva, TSentr. biuro tekhn. informatsii, 1961. 67 p. (MIRA 15:3)

1. Russia (1917- R.S.F.S.R.) Ministerstvo stroitel'stva. Tekhnicheskoye upravleniye.
(Girders) (Prestressed concrete construction)

KOROBKOV, I.A.; MAKAROVA, R.K.

Stratigraphy and faunal characteristics of Paleogene sediments in the Kyzyl Kum and the southern part of the Ural Mountain region. Trudy VSEGEI 102:236-254 '64. (MIRA 18:2)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001031500030-6

MAKAROVA, R.K.; MIRONOVA, L.V.

Comparison of the marine Paleogene sediments in Turgay, Central Asia and the Ural Mountain region. Trudy VSEGEI 102:203-217 '64.
(MIRA 18:2)

KOROBKOV, I.A.; MAKAROVA, R.K.

New pteropod mollusk from the Upper Eocene deposits of the U.S.S.R. Paleont.zhur. no.4:83-87 '62. (MIRA 16:1)

1. Leningradskiy gosudarstvennyy universitet imeni Zhdanova.
(Aral Sea region--Cavoliniidae, Fossil)

YARKIN, V.I.; MAKAROVA, R.K.

A case of the complete identity of complexes of mollusk species in the upper Eocene of the Caspian Lowland and central Kyzyl Kum. Inform.sbor. VSEGEI no.43:79-82 '61. (MIRA 14:12)
(Caspian Lowland--Mollusks, Fossil)
(Kyzyl Kum--Mollusks, Fossil)

KOROBKOV, I.A.; MAKAROVA, R.K.

Recent data on boundary horizons between Eocene and Oligocene deposits in the southern part of the Aral Sea region. Dokl.AN SSSR 134 no.4:902-904 O '60. (MIRA 13:9)

1. Leningradskiy gosudarstvennyy universitet im. A.A.Zhdanova. Predstavleno akad. A.L.Yanshinym.
(Aral Sea region--Geology, Stratigraphic)

On the Stratigraphy of Paleogene Sediments of the Lower Course of the Amu-Dar'ya in Connection With New Mollusk Findings

SOV/20-127-1-45/65

horizon there (Ref 3), as well as with Soviet Central Asia. In the rocks of the lower part of Upper Eocene sediments, bored near the village Chimbay, two left shell-halves of a new type were found: C h l a m y s c i s a r a l i c a s p. n o v. (Fig 1: 10,11). Also other mollusks from this site are shown (Fig 1). No related forms of the new species have hitherto been known. The materials are kept in the Muzey kafedry istoricheskoy geologii of the University mentioned in the Association. There are 1 figure and 3 Soviet references.

ASSOCIATION: Leningradskiy gosudarstvennyy universitet im. A. A. Zhdanova (Leningrad State University imeni A. A. Zhdanov)

PRESENTED: February 28, 1959, by A. L. Yanshin, Academician

SUBMITTED: February 27, 1959

Card 2/2

SOV/20-127-1-45/65

3(5)

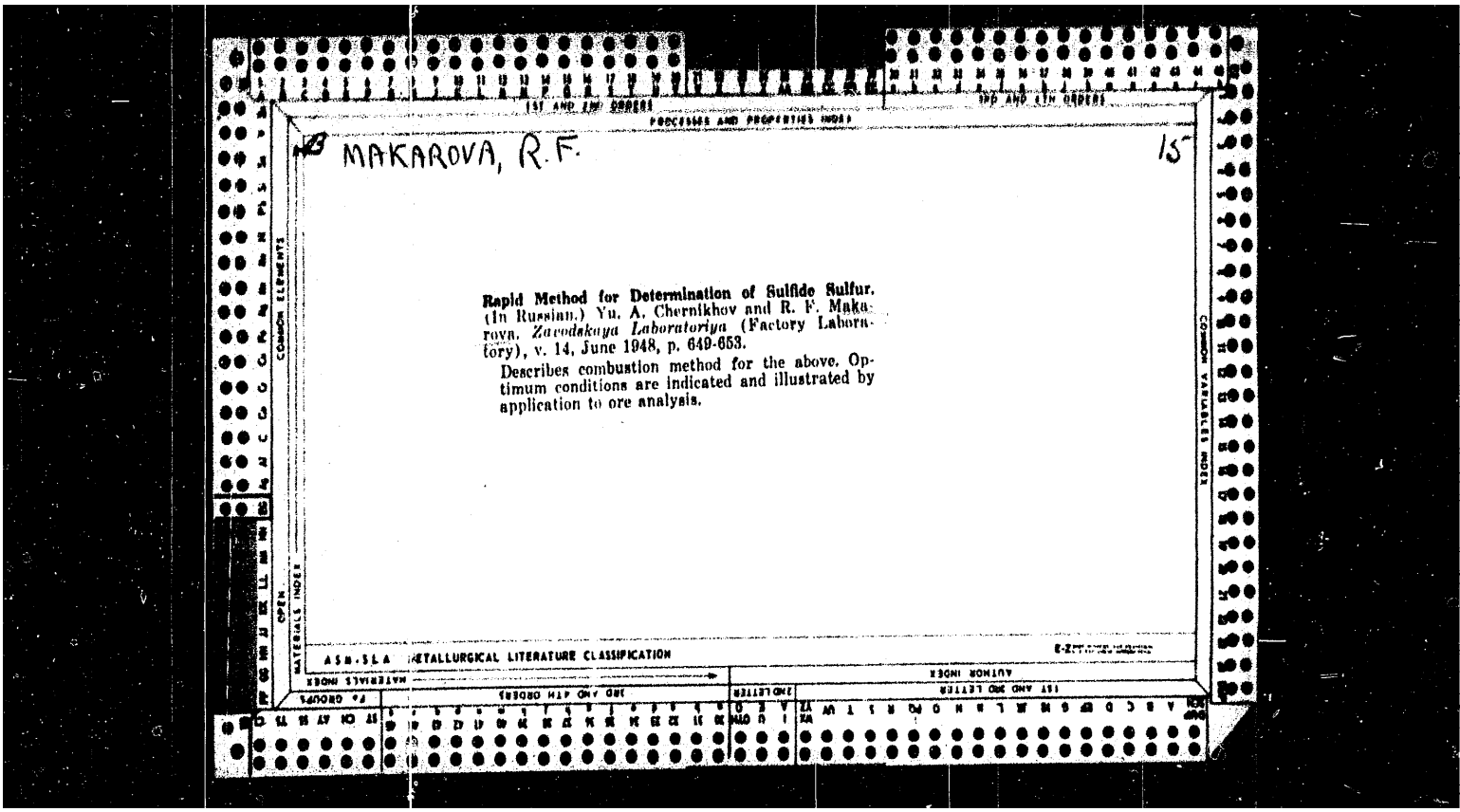
AUTHORS: Korobkov, I. A., Makarova, R. K.

TITLE: On the Stratigraphy of Paleogene Sediments of the Lower Course of the Amu-Dar'ya in Connection With New Mollusk Findings (K stratigrafii paleogenovykh otlozheniy nizov'yev Amu-Dar'i v svyazi s novymi nakhodkami mollyuskov)

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 127, Nr 1, pp 166-167 (USSR)

ABSTRACT: The authors investigated mollusk shells at the University mentioned in the Association; these materials had been collected at the Amu-Dar'ya lower course by a paleontological-stratigraphical team of the Uzbekskoye Geologicheskoye upravleniye (Usbek Geological Administration) both in borehole cores and in natural exposures. By way of an introduction, a description is given of the Paleogene sediments here and at the south and west banks of the Aral Sea (up to 225 m thick). They rest transgressively on chalk from which they are separated by a "gravelite" intermediated layer. (Ref 3). In the mollusk- and foraminiferal fauna found, parallels are drawn to the strata with Lyrolepis caucasica (Ref 1) and with the Beloglinskiy

Card 1/2



MAKAROVA, R.F.

15

Rapid Method for Determination of Sulfide Sulfur. (In Russian.) Yu. A. Chernikhov and R. F. Makarova. *Zavodskaya Laboratoriya* (Factory Laboratory), v. 14, June 1948, p. 649-653.

Describes combustion method for the above. Optimum conditions are indicated and illustrated by application to ore analysis.

has lower defficiency and that the secondary-emission coefficient of niobium-base cathodes is slightly higher than that of tantalum-base cathodes. 2) Rhenium can hardly serve as a base material, in particular owing to its poor ductility. However, rhenium alloys (Re-W and Re-Mo) which have very suitable mechanical properties, could serve as base materials for cathodes. This would facilitate the preparation of the cathodes (vacuum annealing could be replaced by hydrogen annealing) and such cathodes could be more easily controlled. There are 4 figures and 1 table. The most important English-language reference reads as follows: C.T. Sims, G.B. Gaines, Rhenium for electron tubes. Proc. 4-th National Conference Tube Techniques, New York University Press, 1959.

SUBMITTED: December 29, 1961

Card 3/3

Emission properties of thorium- ...

tion, the current-voltage curves for well-activated cathodes were plotted for various temperatures. A figure shows the emission-current density as a function of the temperature of thermally activated ThO_2 and Y_2O_3 - coated cathodes with rhenium- and niobium base. The activation temperatures of the investigated types of cathodes were compared with those of cathodes with tantalum- and molybdenum base. It was found that the emission-current density for cathodes with rhenium base was slightly higher than that of cathodes with tantalum base. The dependence of the secondary-emission coefficient on activation temperature is plotted for all the types of investigated cathodes. A study of the effect of oxygen on cathode emission, showed that the poisoning of cathodes with rhenium base is reversible, the emission being restored quite readily, at working temperatures already; this compares favorably with tantalum-base cathodes, where the poisoning is irreversible. Cathodes with niobium base react to oxygen in the same way as tantalum-base cathodes. It is concluded that: 1) In a limited temperature range (up to 1850°K approximately), it is advantageous to replace tantalum by niobium as a base material; the reasons for this are that niobium

Card 2/3

S/109/62/007/009/011/018
D409/D301

9.3120
26.2531

AUTHORS: Kaganovich, M.V., and Makarova, R.A.

TITLE: Emission properties of thorium- and yttrium oxides on rhenium and niobium bases

PERIODICAL: Radiotekhnika i elektronika, v. 7, no. 9, 1962, 1579 - 1584

TEXT: The authors investigated the thermal activation, the thermionic and secondary-emission properties, and the poisoning of thorium and yttrium oxide cathodes with niobium and rhenium base. The obtained data are compared with similar data for cathodes with tantalum and molybdenum base. The cathode temperature was measured by means of an optical pyrometer. Each measurement was made on 6-8 cathodes of the investigated type. The thermal activation of the cathodes was studied as follows: The cathode temperature was raised stepwise by 50-100°K. After a delay of 20-40 minutes at each step, the emission current was measured at a temperature of 1350°K, or the curve secondary-emission coefficient versus primary-electron velocity, was plotted for a temperature of 1100-1200°K. In addi-

Card 1/3

MAKAROVA, P.Ye.

Treatment of hypertension by a combination of radon baths and Rauwolfia preparations. Sbor. trud. Kursk. gos. med. inst. no.13: 356-360 '58. (MIRA 14:3)

1. Iz sanatoriya Mar'ino Kurskoy oblasti i kliniki propedevtiki vnutrennikh bolezney (zav. - prof. M.A.Cherkasskiy) Kurskogo gosudarstvennogo meditsinskogo instituta.
(HYPERTENSION) (RADON—THERAPEUTIC USE)
(RAUWOLFIA)

SHISHKOV, Ivan Ivanovich; POPOVA, Nadezhda Sergeyevna; MAKAROVA, O.V., red.

[Forestry with the fundamentals of forest plantations] Lesovodstvo s osnovami lesnykh kul'tur. Moskva, Vysshaia shkola, 1965. 365 p. (MIRA 18:7)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001031500030-6

L 32073-66 EWT(m)/T/EWP(t)/ETI IJP(c) DS/JD/WW/JG

ACC NR: AP6014063 SOURCE CODE: UR/0294/66/004/002/0189/0195

AUTHOR: Solov'yev, A. N.; Makarova, O. P. 62 B

ORG: Institute of Heat Physics, Siberian Department, Academy of Sciences, SSSR (Institut teplofiziki Sibirskogo otdeleniya Akademii nauk SSSR)

TITLE: Investigation of sodium and potassium surface tension 27

SOURCE: Teplofizika vysokikh temperatur, v. 4, no. 2, 1966, 189-195 27

TOPIC TAGS: liquid metal, surface tension

ABSTRACT: The surface tension of liquid sodium and potassium was determined up to 1000°C and 800°C, respectively. The measuring apparatus is described in detail. A thin flat plate insertion into the liquid metal was used as the most direct method to make these measurements. The apparatus was tested with other liquids for calibrations and experimental checks. About 1% deviation from accepted data was achieved. Some effect of impurities in the tested metals was noted and resulted in 5% to 8% differences in measured values of the tension when these measurements were taken just after melting and a few hours after melting. The temperature dependence of the surface tension is shown graphically and compared with results of other workers and some of the differences are discussed. Orig. art. has: 5 figures, 2 tables.

SUB CODE: 20/11/ SUBM DATE: 12Mar65/ ORIG REF: 002/ OTH REF: 006

Card 1/2 Liquid Metal 18 UDC: 532.6:546.3

the following table.

p	T, °C	p	T, °C	p	T, °C
1740	159.5	4740	212.4	2000	165.0
1830	161.0	4880	215.5	3000	184.7
2220	169.6	5460	220.7	4000	201.8
2480	176.2	6370	228.5	5000	215.3
2960	182.7	7320	240.4	6000	226.6
3150	186.0	7870	246.5	7000	237.2
3580	193.8	8910	256.8	8000	247.5
4140	202.2	10160	267.1	9000	257.3
4270	207.2	11120	278.3	10000	267.1
				11000	276.6

Surface tension was calculated according to the formula

$$\sigma = \frac{g(txdl + F)}{2(t+x)}$$

where t, x = width and length of the plate, lx = submersion depth, d = density of the metal and F = force. The interpolation line drawn from the data is given by the equation:

$$\sigma = 202 - 0.91(t-98).$$

The mean square deviation from this line is 1.47%. Orig. art. has: 3 figures, 1 table.

SUB CODE: 11, 20/ SUBM DATE: 23Mar65/ ORIG REF: 002/ OTH REF: 005

L 16742-66 EWT(m)/EPF(n)-2/EWA(d)/T/EWP(t) IJP(c) JD/WW/JG
ACC NR: AP5021922 SOURCE CODE: UR/0207/65/000/004/0174/0176

AUTHOR: Kiriyanenko, A. A. (Novosibirsk); Makarova, O. P. (Novosibirsk); Romanov, V. D. (Novosibirsk); Solov'yev, A. N. (Novosibirsk)

ORG: none

TITLE: Experimental investigation of surface tension in liquid sodium

SOURCE: Zhurnal prikladnoy mekhaniki i tekhnicheskoy fiziki, no. 4, 1965, 174-176

TOPIC TAGS: surface tension, ~~liquid~~ sodium, liquid metal

ABSTRACT: An experimental apparatus was built to measure surface tension in liquid sodium at high temperatures. A block diagram and description of the apparatus are given. Pure grade sodium was fed into a crucible (preheated to 400-500°C) filled with pure helium. The experiment was conducted in the temperature range of 100-937°C. Thermocouples were used to measure the temperature of the crucible. The floating plate used in the experiment was made of 1Kh18N9T stainless steel. It was found that immediately after melting, the values of surface tension were about 5-8% lower than those obtained after longer periods (1-1.5 hrs). Measurements of surface tension in liquid sodium are given in

Card 1/2

KAPLUN, A.B.; MAKAROVA, O.P.; SOLOV'YEV, A.N.

New vibration viscosimeters. Zav. lab. 30 no.1:[illegible] '64.
(MIRA 17:9)

1. Institut teplofiziki Sibirskogo otdeleniya AN SSSR.

MAKAROVA, O.P.

Result of the use of iontophoresis of zinc in treating mycotic paronychia and onychia. Vest. derm. i ven. 32 no.6:29-31 N-D '58. (MIRA 12:1)

1. Iz otdeleniy fizioterapii i mikologii (nauchnyy rukovoditel' prof. A. M. Ariyevich) Klinicheskoy kozhno-venerologicheskoy bol'nitsy imeni Korolenko.

(NAILS, dis.
mycotic onychia. ther., zinc. iontophoretic admin (Rus))
(PARONYCHIA, ther.
mycotic, ther., zinc, iontophoretic admin. (Rus))
(ZINC. ther. use
mycotic onychia & paronchia, iontopheretic admin. (Rus))

SAZONOV, S.V., red.; MAKAROVA, O.K., red.

[Soviet trade; a statistical abstract] Sovetskaia torgovlia; statisticheskii sbornik. Moskva, Statistika, 1964. 502 p.
(MIRA 17:9)

1. Russia (1923- U.S.S.R.) Tsentral'noye statisticheskoye upravleniye. 2. Zamestitel' nachal'nika Tsentral'nogo statisticheskogo upravleniya SSSR (for Sazonov).

VOLODARSKIY, L.M., red.; BUTOV, A.S., red.; MOSKOVKINA, A.S., red.; SHCHADILOV, N.M., red.; MAKAROVA, O.K., red.; FROLOVA, M.P., red.

[Industry of the U.S.S.R.; statistical abstract] Promyshlennost' SSSR; statisticheskii sbornik. Moskva, Izd-vo "Statistika," 1964. 494 p. (MIRA 17:6)

1. Russia (1923- U.S.S.R.) TSentral'noye statisticheskoye upravleniye. 2. Zamestitel' nachal'nika TSentral'nogo statisticheskogo upravleniya SSSR (for Volodarskiy).

TISHIN, Sergey Dmitriyevich; TISHIN, Saveliy Sergeyevich; MAKAROVA, O.K., red.; KAPRALOVA, A.A., tekhn. red.

[Involution tables with bases from 0.00001 to 1000 and exponents from 0.01 to 4.] Tablitsy vozvedeniia v stepen' pri osnovaniiakh ot 0,00001 do 1000 i pokazateliakh ot 0,01 do 4. Izd.3., dop. Moskva, Gosstatizdat, 1963. 399 p. (MIRA 16:12)

(Mathematics--Tables, etc.)

L 20637-66
ACC NR: AP6010836

explained by the nonmonotocity of the degree of compression ρ_∞/ρ_c in a straight shock due to M_∞, and in the case of hypersonic flows, the stand-off distance is uniquely connected with the compression coefficient. The investigation also shows that the similarity of flows, established in the case of flows of a perfect gas past bodies of various shapes, is preserved in the presence of dissociation. The authors thank G. F. Telenin for his attention and help. Orig. art. has: 5 figures, 8 formulas, and 3 tables.

[AB]

SUB CODE: 20/ SUBM DATE: 15Jan65/ ORIG REF: 004/ ATD PRESS: 4225

Card 3/3 BK

10%) and that the pressure distribution depends slightly on the parameters of free flow (see Fig. 1). Fig. 2 shows the effect of body shape

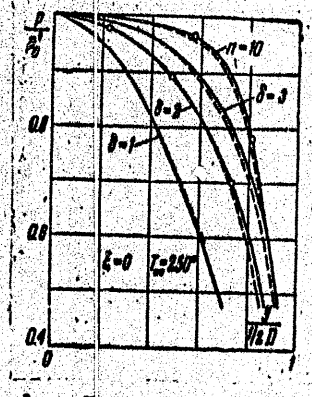


Fig. 1. Pressure distribution versus y

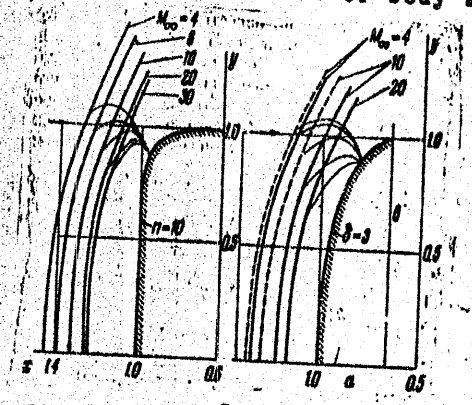


Fig. 2. Flow configurations

and M_∞ on flow configuration with $p_\infty = 0.01$ and $T_\infty = 250°K$, and that dissociation leads to higher compression in the shock layer. The nonmontonic dependence of stand-off distances of shock waves on M_∞ is

L 20637-66 EWT(1)/EWP(m)/EWT(m)/EWA(d)/T/EWA(1) WW/JW/WE
ACC NR: AP6010836 SOURCE CODE: UR/0421/66/000/001/0016/0021

AUTHOR: Gilinskiy, S. M.(Moscow); Makarova, N. Ye.

ORG: none

67
66
B

TITLE: Calculating supersonic air flows past blunted bodies with physicochemical transformations taken into account

SOURCE: AN SSSR. Izvestiya. Mekhanika zhidkosti i gaza, no. 1, 1966, 16-21

TOPIC TAGS: supersonic aerodynamics, supersonic flow, detached shock wave, equilibrium flow, inviscid flow, shock wave, dissociation

ABSTRACT: Supersonic air flows past blunted axisymmetrical bodies with a detached shock wave are investigated under the assumption of equilibrium physicochemical transformations. Air flows past ellipsoids of revolution with eccentricities $\delta = b/a = 1, 2, 3$ and a body with a forward end described by the equation $|x|^n + |y|^n = 1$ with $n = 10$ were calculated on a computer by means of the Gilinskiy-Telenin-Tin'yakov method over a wide range of flow parameters: M_∞, from 4 to 50; pressure p_∞, from 10^{-4} atm to 1 atm; and temperature T, from 200° to 300°K. The results presented in the tables and graphs for air and a perfect gas show that dissociation has little effect on pressure (about 5 to

Card 1/3

PROKOPCHUK, B.I.; SERGIYENKO, V.M.; MAKAROVA, N.V.

Diamonds in the northeastern part of the Siberian Platform (Lena Valley diamond-bearing area). Dokl. AN SSSR 154 no. 3: 610-612 Ja '64. (MIRA 17:5)

1. Vsesoyuznyy aerogeologicheskiy trest. Predstavleno akademikom D.I.Shcherbakovym.

METLYAYEVA, N.G.; MAKAROVA, N.V.

Dyeing sheepskin gray using vat dyes. Leg.prom. 16 no.5:32 My '56.
(MLRA 9:8)

(Dyes and dyeing--Fur) (Hides and skins)

SANDRIGAYLO, N F.; VASIL'YEV, M.V., prof., doktor tekhn.nauk; GRAUR, I.F.; USOV, F.M.; RYABOV, A.I.; ZHANTEMIROV, S.D.; VOROSHILIN, G.I.; MAKAROVA, N.U., red.

[Accelerated development of strip mines and expansion of iron ore mining; as practiced at the Sokolovka-Sarbay Mining and Ore Dressing Combine] Forsirovannaia podgotovka kar'erov i razvitie dobychi zheleznykh rud; na primere Sokolovsko-Sarbaiskogo gorncobogatitel'nogo kombinata. Sverdlovsk, Sredne-Ural'skoe gos. knizhnoe izd-vo, 1964. 115 p. (MIRA 18:6)

VASIL'YEV, M.V.; V'YUKHINA, A.S.; DORONENKO, Ye.P.; ZEBZIYEV, K.V., kand. tekhn. nauk; LATS, V.M.; PARFENOV, G.V.; POPOV, V.Ye.; TROITSKIY, D.P.; FADDEYEV, B.V.; TSVETAYEVA, Z.N.; ZUBRILOV, L.Ye., kand. tekhn. nauk, otv. red.; MAKAROVA, N.N., red.; PAL'MIN, M.Z., tekhn. red.

[Evaluation and the prospects of the development of the mineral resources for ferrous metallurgy in Chelyabinsk area] Otsenka i perspektivy razvitiia syr'evoi bazy chernoi metallurgii Cheliabinskogo raiona. Sverdlovsk, AN SSSR, 1964. 67 p. (MIRA 17:4)

BORISOGLEBSKIY, B.N., kand. tekhn. nauk, red.; VINOGRADOV, Yu.M., kand. tekhn. nauk, red.; GALITSKIY, B.A., red.; GOFYAINOVA, A.V., kand. tekhn. nauk, red.; ZHEREBTSOV, A.N., red.; KORETSKIY, I.M., red.; MAKAROVA, N.S., red.; MORDOVSKIY, S.I., kand. tekhn. nauk; SALAMATOV, I.I., doktor tekhn. nauk; SHVARTS, G.L., kand. tekhn. nauk, red.; YUKALOV, I.N., kand. tekhn. nauk, red.; YUSOVA, G.M., kand. tekhn. nauk, red.; VASIL'YEVA, G.N., red.

[Manufacture of filters in the U.S.S.R.; collection of reports at the united session of the scientific and technical councils of the All-Union Scientific Research Institute of Chemical Machinery, the Ukrainian Scientific Research Institute of Chemical Machinery and the technical council of the Ural Chemical Machinery Plant] Fil'trostroenie v SSSR; sbornik dokladov na ob"edinennoi sessii nauchno-tekhnicheskikh sovetov Niikhimmasha, Ukrniikhimmasha i tekhnicheskogo soveta zavoda "Uralkhimmash." Moskva, Otdel nauchno-tekhn. informatsii, 1963. 107 p. (MIRA 17:12)

1. Nauchno-issledovatel'skiy institut khimicheskogo mashinostroyeniya (for Borisoglebskiy, Mordovskiy).

AKSENOV, Petr Pavlovich, prof., doktor tekhn. nauk; Prinimali uchastiye: MAKAROVA, N.S., kand. tekhn. nauk; PROKHOROV, I.K., dots.; TYUKINA, Yu.P., dots.; PESOTSKIY, A.N., retsenzent; KHUDIN, A.S., retsenzent; BASKAKOV, Ye.D., otv. red.

[Technology of lumber] Tekhnologiia pilomaterialov. Moskva, Goslesbumizdat, 1963. 578 p. (MIRA 17:5)

MAKAROV, E.V.

Evaluation of the survival of young sturgeons in Don hatcheries.
Trudy VNIRO 56:141-170 '64. (MIRA 18:4)

1. Azovskiy nauchno-issledovatel'skiy institut rybnogo khozyaystva.

BOYKO, Ye.G.; MAKAROV, E.V.

Evaluation of the effectiveness of commercial cultivation of young Don pike perch and bream. Trudy AzNIIRKH no.6:253-281 '63. (MIRA 17:8)

MAKAROVA, N. S.

Dissertation: "An Investigation of the Combined Installations for Stowage and for Dismantling Sawn Timber Stacks." Cand Tech Sci, Moscow Forestry Engineering Inst, 23 Jun 54. (Vechernyaya Moskva, Moscow, 14 Jun 54)

SO: SUM 318, 23 Dec 1954

ACC NR: AT7007280

(with a purity of 99%). After the precipitate is filtered off, the amine may be regenerated by addition of CaO, which combines with the sulfate radical to form $CaSO_4$. This may be removed, and the pure amine is ready for re-use in the process. Orig. art. has: 3 figures and 6 tables.

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 006/ OTH REF: 002

Card 2/2

ACC NR: AT7007280 (N) SOURCE CODE: UR/3249/66/000/013/0027/0034

AUTHORS: Zverev, L. V.; Petrova, N. V.; Mural', G. N.; Makarova, N. P.

ORG: none

TITLE: The use of water-soluble amines in treating tantalum-niobium materials

SOURCE: Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya. Mineral'noye syr'ye, no. 13, 1966. Obogashcheniye i pererabotka mineral'nogo syr'ya (Concentration and processing of minerals), 27-34

TOPIC TAGS: metallurgy, tantalum compound, niobium compound, amine

ABSTRACT: The authors have found that the use of oxalic acid or hydrogen peroxide in forming Ta and Nb complexes is unsatisfactory because of instability and other factors. The use of water-soluble amines is suggested. The present paper outlines the optimal conditions for leaching Nb and Ta from sulfate cake by using as complexing agents methylamine, monoethanolamine, and triethanolamine. Columbite concentrates were used in the test. The technique found to be most satisfactory is the following: one part (by weight) of the concentrate is added to 2.5--3 parts of H_2SO_4, and the mix is held for two hours at 350C. The material is then washed with water and treated with methylamine for 30 minutes at 40C. The Nb and Ta are now in solution and may be removed. Neutralization with a weak mineral acid precipitates Nb and Ta pentoxides

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ACC NR: AT7007279

may be effected by extraction with trioctylamine in kerosene, in a three-stage process. The final product contains 98.8% Ta_2O_5 and 0.203% Nb_2O_5. Orig. art. has: 9 figures and 8 tables.

SUB CODE: 11, 07/ SUBM DATE: none/ ORIG REF: 004/ OTH REF: 001

Card 2/2

ACC NR: AT7007279 (A) SOURCE CODE: UR/3249/66/000/013/0016/0026

AUTHORS: Petrova, N. V.; Mural', G. N.; Makarova, N. P.

ORG: none

TITLE: Chemical treatment of columbite and microlite concentrates

SOURCE: Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya. Mineral'noye syr'ye, no. 13, 1966. Obogashcheniye i pererabotka mineral'nogo syr'ya (Concentration and processing of minerals), 16-26

TOPIC TAGS: metallurgy, tantalum compound, niobium compound, chemical separation

ABSTRACT: In recent years, tantalum has been extracted with increasing success from concentrates of niobium minerals in which the Ta_2O_5:Nb_2O_5 ratio may be as low as 1:20. The present paper describes a laboratory experiment to extract Ta_2O_5 and Nb_2O_5 separately from columbite concentrates containing 43--46% of the combined oxides at a Ta_2O_5:Nb_2O_5 ratio of 1:10 to 1:13. One part concentrate (by weight) is mixed with three parts caustic soda and fused (at 750C for 2 hrs). A dilute solution of NaOH is then used to wash the product, and Sn, Si, Ti, and W go into solution, leaving Nb, Ta, Fe, Mn. The Fe and Mn are dissolved by an acid solution of HCl and H_2SO_4, and the Nb and Ta pentoxides (98.5% pure) appear on roasting. By selective solution with H_2SO_4, the Ta_2O_5:Nb_2O_5 ratio may be increased from 1:13 to 2:1. Further purification

Card 1/2

MAKAROVA, N.P.

Pathohistological changes in thrombophlebitis appearing as a basis for surgical treatment. Khirurgiia 36 no.12:24-27 '60.
(MIRA 14:1)

1. Iz gospital'noy khirurgicheskoy kliniki (zav. - zasluzhennyy deyatel' nauki chlen-korrespondent AMN SSSR prof. A.T. Lidskiy) Sverdlovskogo meditsinskogo instituta.
(VEINS--DISEASES)

MAKAROVA, N. P., Cand Med Sci -- (diss) "Clinic and operative treatment of thrombophlebitis," Sverdlovsk, 1960, 13 pp (Sverdlovsk State Medical Institute)

(KL, 40-60, 128)

CHUGUNOVA, N.I.; ASSMAN, A.V.; MAKAROVA, N.P.

Growth and fatness dynamics in fishes as adaptive processes (based on experimental studies of carp in the Volga Delta). Trudy Inst. morf. zhiv. no.39:96-181 '61. (MIRA 14:11)
(Volga Delta--Carp) (Adaptation (Biology))

MAKAROVA, N.P.

Some characteristics of fat accumulation in the carp. Trudy sov. Ikht. kom. no.13:397-401 '61. (MIRA 14:8)

1. Laboratoriya ikhtiologii Instituta morfologii zhivotnykh AN SSSR.

(Carp) (Fat)

L 05204-67

ACC NR: AP7000759

TOPIC TAGS: silane, ammonolysis

SUB CODE: 07 / SUBM DATE: 18Mar65 / ORIG REF: 004 / OTH REF: 009

Card 2/2

L 05204-67 EWP(j)/EWT(m) RM

ACC NR: AP7000759 SOURCE CODE: UR/0079/66/036/005/0895/0900

ANDRIANOV, K. A., KONONOV, A. M., MAKAROVA, N. N., Institute of Heteroorganic Compounds, Academy of Sciences SSSR (Institut elementoorganicheskikh soyedineniy AN SSSR)

20 B

Reaction of Ammonolysis of Trialkyl(aryl)Chlorosilanes"

Moscow, Zhurnal Obshchey Khimii, Vol 36, No 5, 1966, pp 895-900

Abstract: The ammonolysis of methylethylphenylchlorosilane and methyldiphenylchlorosilane and the coammonolysis of trimethylchlorosilane with dimethylphenylchlorosilane and methyldiphenylchlorosilane were studied. In the ammonolysis of methylethylphenylchlorosilane, both in excess liquid ammonia and in a stream of gaseous ammonia, only dimethyldiethyldiphenyldisilazane is formed. In the ammonolysis of methyldiphenylchlorosilane, two products are formed: diphenylmethylaminosilane and dimethyltetraphenyldisilazane. The coammonolysis of trimethylchlorosilane with methyldiphenylchlorosilane in equimolar amounts does not lead to the formation of 1,1,1,3-tetramethyl-3,3-diphenyldisilazane, but proceeds separately, forming hexamethyldisilazane and methyldiphenylaminosilane. If the reaction is conducted in excess trimethylchlorosilane, which reacts readily with ammonia, the coammonolysis product is formed. New organosilazanes and organoaminosilanes were produced and characterized. Methyldiethylphenylsilane was described. Orig. art. has: 3 tables. [JPRS: 37,177]

Card 1/2 UDC: 547.245.167/65

L 11536-66 EWT(m)/T/EWP(j) RM

ACC NR: AP6006363 (A) SOURCE CODE: UR/0413/66/000/002/0095/0096

INVENTOR: Andrianov, K. A.; Kononov, A. M.; Makarova, N. N. 14

ORG: none

TITLE: Preparative method for polysilazanes. Class 39, No. 178108 B 15

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 2, 1966, 95-96

TOPIC TAGS: polysilazane, polymerization

ABSTRACT: An Author Certificate has been issued for a preparative method for linear or spiro polysilazanes. The method involves polymerization at above 300C of alkylphenyldisilazanes and alkylphenyl(phenylamino)silanes in the presence of alkali. [BO]

SUB CODE: 11/ SUBM DATE: 13Mar65/ ATD PRESS: 4198

07/

Card 1/1 UDC: 678.84

L 27165-65

ACCESSION NR: A[illegible]5005598

between T, and M or [illegible] was shown experimentally for natural, isoprene, chloroprene (KR-A—type Nairit), and SKN-40 nitrile rubbers, polyisobutylene, and liquid thiocol. The thermomechanical measurement conditions which will ensure a reliable correlation were determined. Orig. art. has: 7 figures. [SM]

ASSOCIATION: Institut organicheskoy khimii AN SSSR, Kazan (Institute of Organic Chemistry, AN SSSR); Khimicheskiy institut im. A. Ye. Arbuzova AN SSSR (Chemical Institute, AN SSSR)

SUBMITTED: 23Ap64 ENCL: 00 SUB CODE: OC, NP

NO REF SOV: 006 OTHER: 002 ATD PRESS: 3191

Card 2/2

L 27185-65 EWT(m)/EPF(c)/EPR/EWP(t)/T Pc-4/Pr-4/Pe-4 RPL EM/WW/RM

ACCESSION NR: AP5003598 S/0190/65/007/002/0299/0304

AUTHOR: Yevel'baum, B. Ya.; Gubanov, E. F.; Adamovich, E. P.; Dianov, M. P.; Yakubov, B. N.

TITLE: Determination of the molecular weight of linear polymers by the thermomechanical method

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 7, no. 2, 1965, 299-304

TOPIC TAGS: thermomechanical method, rubber, molecular weight

ABSTRACT: A new rapid and accurate method has been proposed for determining the molecular weight of amorphous linear polymers, based on thermomechanical curves. The method is based on the correlation of the temperature (T_k) of the completion of penetration of an indenter into the specimen with the intrinsic viscosity (η) of solutions of the specimen, and, hence, its molecular weight (M). Once a T_k versus M calibration curve has been plotted, the molecular weight determination is reduced to the plotting of a thermomechanical curve to find T_k and reading M from the calibration curve. In contrast to existing methods, the new method does not require the determination of the glass-transition flow and temperatures. It is applicable to polymeric homologs which do not exhibit high elastic properties. The correlation

Card 1/2

MAKAROVA, N.M.

Projective definitions of measure of a plane. Uch. zap. MGPI no. 243:274-290 '65 (MIRA 19:1)